



Assessment of Mobile Broadband in California

Federal-State Joint Conference on Advanced
Services, Panel on Internet Access and
Adoption Programs and Strategies

November 19, 2014

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Key Points

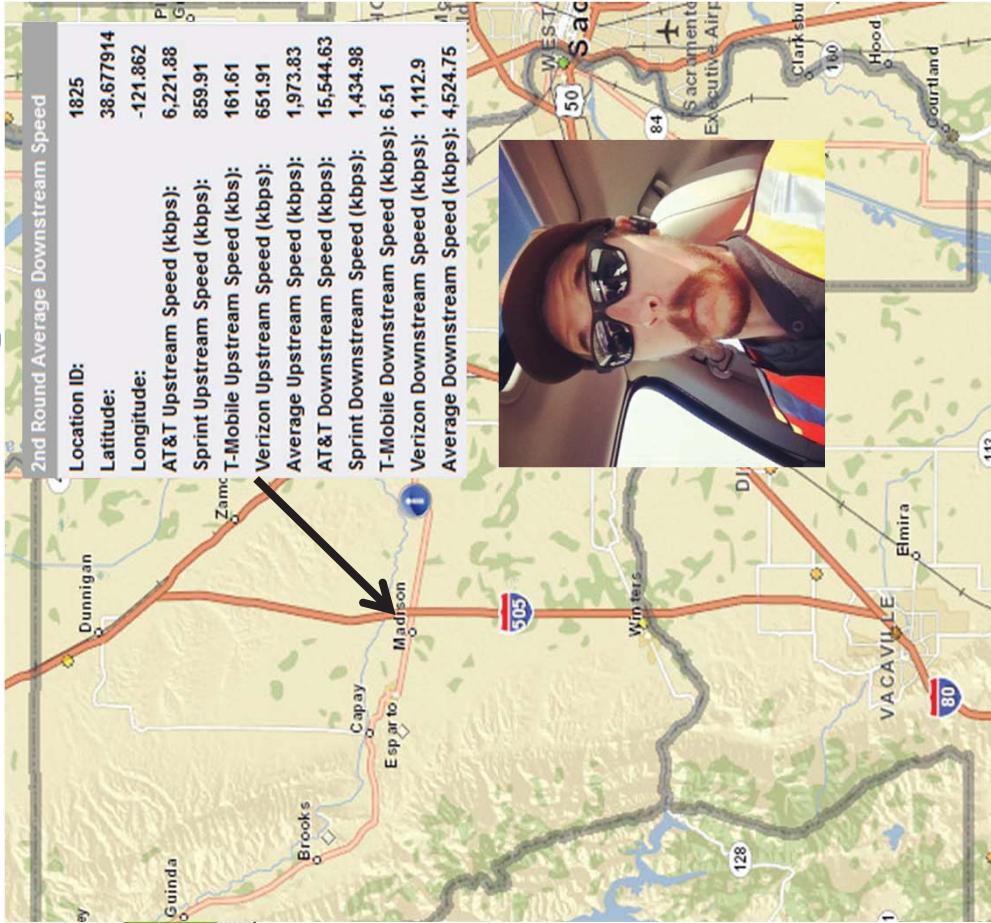
- Advertised coverage is meaningless without reliable service level parameters
- Despite prevalence of LTE, rural service is substantially inferior to urban service
- Mobile broadband is becoming more, important, but is it a reliable substitute for wireline?



California Advanced Services Fund

- 0.464% surcharge on telephone bills in California
- Four accounts (\$315M total):
 - Broadband Infrastructure Grant Account (\$270M)
 - Broadband Infrastructure Revolving Loan Account (\$10M)
 - Rural and Urban Regional Broadband Consortia Grant Account (\$10M)
 - Broadband Public Housing Account (\$25M)
- Provides funding for capital costs of broadband infrastructure projects in unserved and underserved areas in California.
- Maximum grant award:
 - 70% total costs for projects in unserved areas (<768 Kb/s down/200 up)
 - 60% total costs for projects in underserved areas (<6 Mb/s down/1.5 up)

CalSPEED and Field Testing



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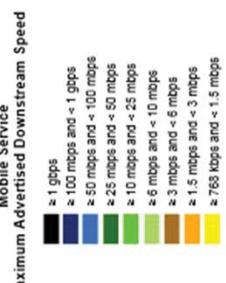
STATE OF CALIFORNIA BROADBAND AVAILABILITY



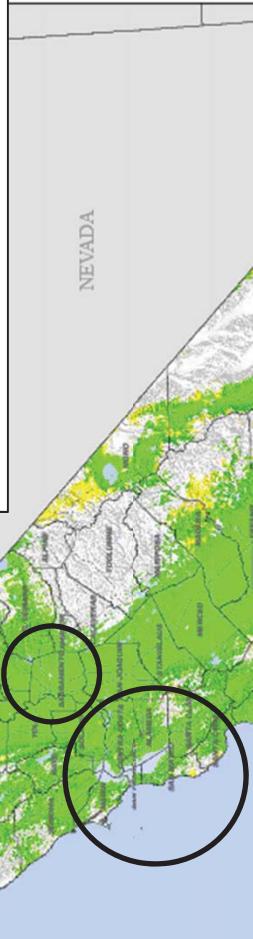
9TH ROUND - VZ

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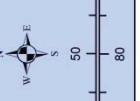
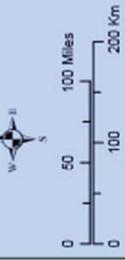
Mobile Service Maximum Advertised Downstream Speed



Cooler colors = faster speeds



Major urban areas circled



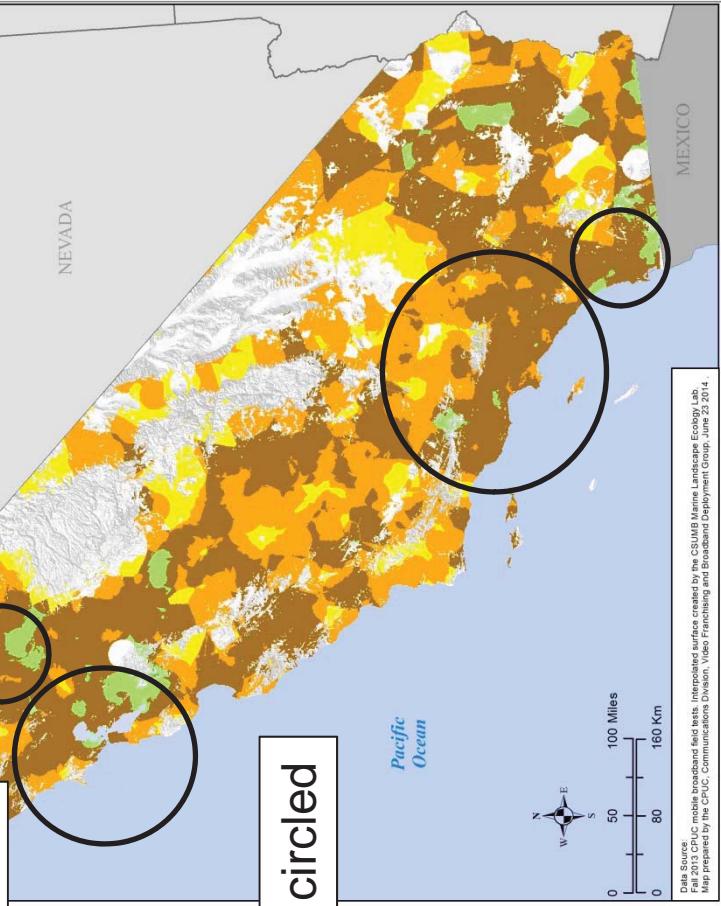
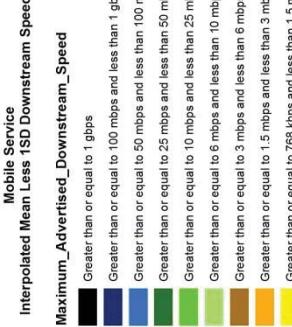
Data Source:
All CRTC mobile broadband field tests, intercarrier surface created by the CRTC's Market Landscape Ecology Lab
Map prepared by the CRTC, Communications Division, Video Franchising and Broadband Deployment Group, June 23, 2014

STATE OF CALIFORNIA BROADBAND AVAILABILITY



Fall 2013 Field Test - Verizon Wireless

Mobile Service Interpolated Mean Less TSD Downstream Speed



MEXICO

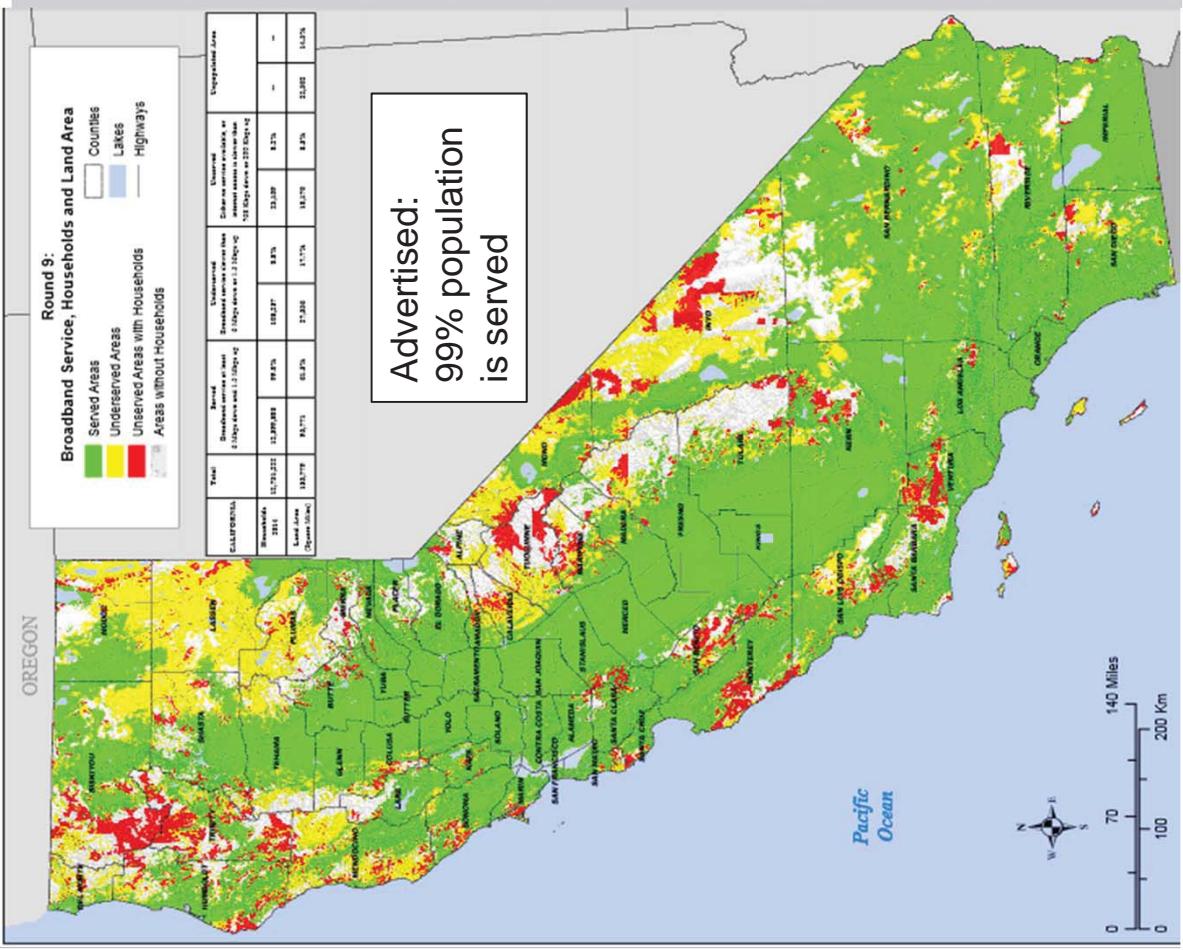
OREGON

NEVADA

Pacific Ocean

MEXICO

STATE OF CALIFORNIA Mobile Broadband Availability



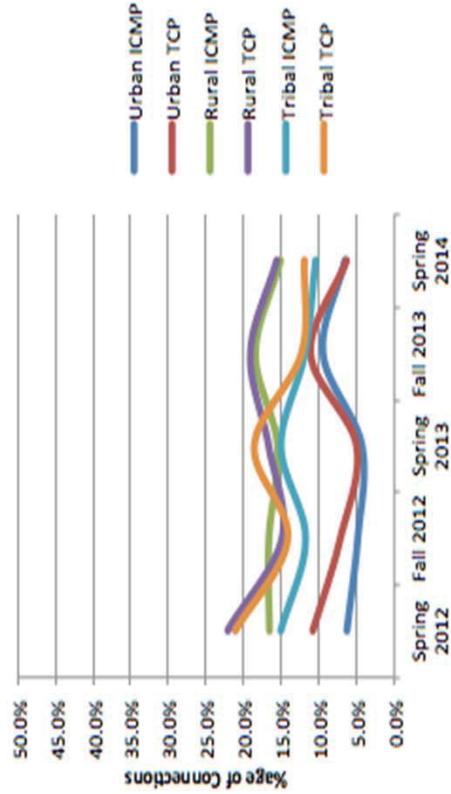
While Broadband

Mean minus one
standard deviation:
64% of population
is served
(13.7M under- or
un-served)

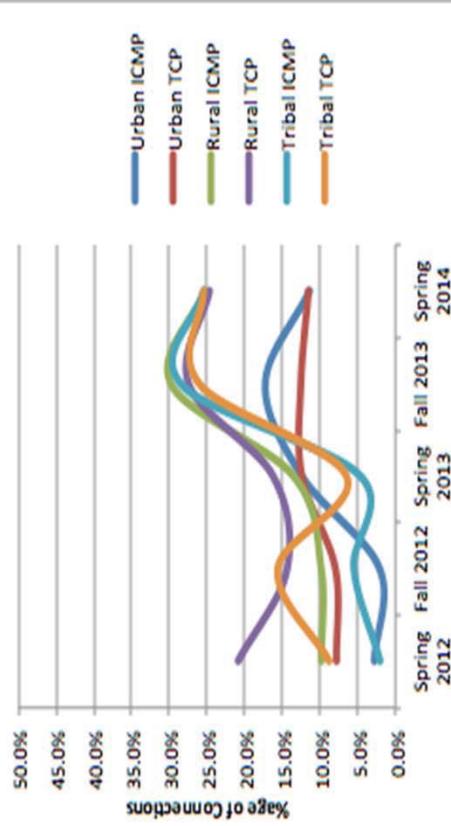
Urban vs. Rural



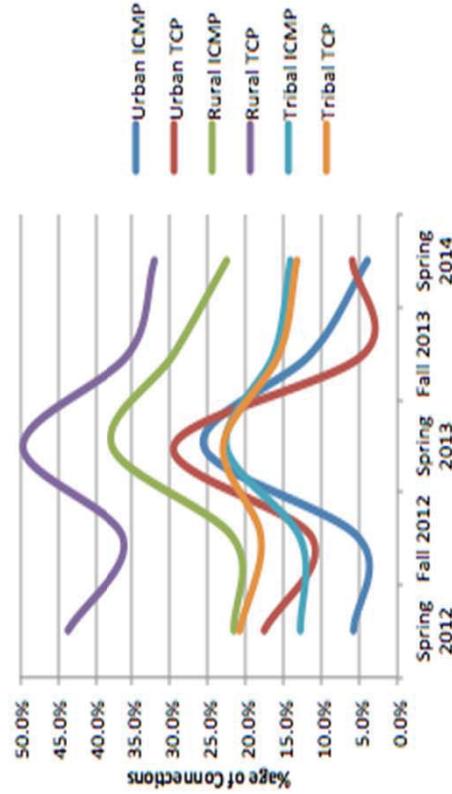
AT&T ICMP and TCP Failure Rates



Sprint ICMP and TCP Failure Rates



T-Mobile ICMP and TCP Failure Rates



Verizon ICMP and TCP Failure Rates

